the conditions that governed the first arrivals. These were mostly on rainy or cloudy days, for the earlier birds, while the warblers waited carefully for the warmer waves.

ABNORMAL COLORATION OF THE SCAUP DUCK.

BY W. F. HENNINGER.

Among a series of 10 (8 males and 2 females) of the Scaup Duck (Marila marila) shot this spring on the Loramie Reservoir and the Miami Canal, there are three males (all shot March 27, 1909), that show a decidedly abnormal coloration. While the normal plumage of the belly and sides is pure white, one male (No. 736 coll, W. F. H.) has the biggest part of the belly gravish, with darker shaft streaks to each feather and a few brown feathers in the black breast. One male, No. 734 (coll. W. F. H.) has more brown feathers on the breast than black ones, these brownish feathers extending well up among the neck feathers. No. 738 (coll. W. F. H.) male has not only more brownish breast feathers than No. 734, but the whole lower breast, belly and abdomen beyond the anus are overlaid with a rusty-brownish wash extending upward on the side, and has one bright brown tail feather. This certainly was not caused by grease as the specimens were freshly killed, nor by any compound of iron in the water as suggested by Mr. I. F. Arrow in the Auk, April, 1909, p. 189. The color would not vield to chemical treatment and must be due to other causes. Mr. Leon J. Cole in the Osprey, 1897, p. 69, records a similar specimen of the Lesser Scaup Duck as No. 738 of my collection, only mine is the Big Scaup. No doubt there may be other speciments of Marila marila showing similar abnormal coloration in the large museums, but if so, they certainly have not been brought to light and it seems worth while to direct the attention of the working ornithologists to such occurrences.

102